

## SEQUENCE LISTING

<110> Okazaki National Research Institutes

<120> Method for producing a biosensor protein capable of regulating a fluorescence property of Green Fluorescent Protein, and the biosensor protein produced by the method.

<130> A000004913

<150> JP/2000-356047

<151> 2000-11-22

<160> 12

<170> PatentIn Ver. 2.0

<210> 1

<211> 717

<212> DNA

<213> Aequorea victoria

<220>

<221> CDS

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gag ctg gac ggc gac gta aac ggc cac aag ttc agc gtg tcc ggc gag 96  
 Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu  
                   20                                  25                                  30

ggc gag ggc gat gcc acc tac ggc aag ctg acc ctg aag ttc atc tgc 144  
 Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys  
                   35                                  40                                  45

acc acc ggc aag ctg ccc gtg ccc tgg ccc acc ctc gtg acc acc ctg 192  
 Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Leu  
                   50                                  55                                  60

acc tac ggc gtg cag tgc ttc agc cgc tac ccc gac cac atg aag cag 240  
 Thr Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Gln  
                   65                                  70                                  75                                  80

cac gac ttc ttc aag tcc gcc atg ccc gaa ggc tac gtc cag gag cgc 288  
 His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg  
                                   85                                  90                                  95

acc atc ttc ttc aag gac gac ggc aac tac aag acc cgc gcc gag gtg 336  
 Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val  
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aag ttc gag ggc gac acc ctg gtg aac cgc atc gag ctg aag ggc atc 384  
 Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile  
                   115                                  120                                  125

gac ttc aag gag gac ggc aac atc ctg ggg cac aag ctg gag tac aac 432  
 Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn  
                   130                                  135                                  140

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tcc cta ttt gac aag gac ggg gat ggg aca ata aca acc aag gag ctg 96  
Ser Leu Phe Asp Lys Asp Gly Asp Gly Thr Ile Thr Thr Lys Glu Leu  
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ggg acg gtg atg cgg tct ctg ggg cag aac ccc aca gaa gca gag ctg 144  
Gly Thr Val Met Arg Ser Leu Gly Gln Asn Pro Thr Glu Ala Glu Leu  
35 40 45

cag gac atg atc aat gaa gta gat gcc gac ggt aat ggc aca atc gac 192  
Gln Asp Met Ile Asn Glu Val Asp Ala Asp Gly Asn Gly Thr Ile Asp  
50 55 60

ttc cct gaa ttc ctg aca atg atg gca aga aaa atg aaa gac aca gac 240  
Phe Pro Glu Phe Leu Thr Met Met Ala Arg Lys Met Lys Asp Thr Asp  
65 70 75 80

agt gaa gaa gaa att aga gaa gcg ttc cgt gtg ttt gat aag gat ggc 288  
Ser Glu Glu Glu Ile Arg Glu Ala Phe Arg Val Phe Asp Lys Asp Gly  
85 90 95

aat ggc tac atc agt gca gca gag ctt cgc cac gtg atg aca aac ctt 336  
Asn Gly Tyr Ile Ser Ala Ala Glu Leu Arg His Val Met Thr Asn Leu  
100 105 110

gga gag aag tta aca gat gaa gag gtt gat gaa atg atc agg gaa gca 384

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Gly Glu Lys Leu Thr Asp Glu Glu Val Asp Glu Met Ile Arg Glu Ala  
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gac atc gat ggg gat ggt cag gta aac tac gaa gag ttt gta caa atg 432  
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<222> (1)..(63)

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<223> M13 segments of smooth muscle myosin light chain kinase

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atc gag gac ggc agc gtg cag ctc gcc gac cac tac cag cag aac acc 192  
Ile Glu Asp Gly Ser Val Gln Leu Ala Asp His Tyr Gln Gln Asn Thr  
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ccc atc ggc gac ggc ccc gtg ctg ctg ccc gac aac cac tac ctg agc 240

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 65 70 75 80

acc cag tcc gcc ctg agc aaa gac ccc aac gag aag cgc gat cac atg 288  
 Thr Gln Ser Ala Leu Ser Lys Asp Pro Asn Glu Lys Arg Asp His Met  
 85 90 95

gtc ctg ctg gag ttc gtg acc gcc gcc ggg atc act ctc ggc atg gac 336  
 Val Leu Leu Glu Phe Val Thr Ala Ala Gly Ile Thr Leu Gly Met Asp  
 100 105 110

gag ctg tac aag ggc ggt acc gga ggg agc atg gtg agc aag ggc gag 384  
 Glu Leu Tyr Lys Gly Gly Thr Gly Gly Ser Met Val Ser Lys Gly Glu  
 115 120 125

gag ctg ttc acc ggg gtg gtg ccc atc ctg gtc gag ctg gac ggc gac 432  
 Glu Leu Phe Thr Gly Val Val Pro Ile Leu Val Glu Leu Asp Gly Asp  
 130 135 140

gta aac ggc cac aag ttc agc gtg tcc ggc gag ggc gag ggc gat gcc 480  
 Val Asn Gly His Lys Phe Ser Val Ser Gly Glu Gly Glu Gly Asp Ala  
 145 150 155 160

acc tac ggc aag ctg acc ctg aag ttc atc tgc acc acc ggc aag ctg 528  
 Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys Thr Thr Gly Lys Leu  
 165 170 175

ccc gtg ccc tgg ccc acc ctc gtg acc acc ctg acc tac ggc gtg cag 576  
 Pro Val Pro Trp Pro Thr Leu Val Thr Thr Leu Thr Tyr Gly Val Gln  
 180 185 190

tgc ttc agc cgc tac ccc gac cac atg aag cag cac gac ttc ttc aag 624

[illegible]

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<223> Primer for myosin light chain kinase M13

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gtgacctgtc tt 62

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ggacgcgtac tagtaacgtc tatatcatgg ccgac 35

10/12

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